



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,936	08/22/2003	Samuel D. Naffziger	200210023-1	3016

22879 7590 03/17/2006

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

SHINGLETON, MICHAEL B

ART UNIT PAPER NUMBER

2817

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No. 10/646,936	Applicant(s) NAFFZIGER ET AL.	
Examiner Michael B. Shingleton	Art Unit 2817	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 16 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection. ✓  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

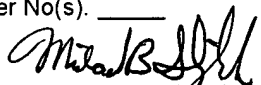
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☒ Other: attached the PTOL-892 showing the definition of diode.

  
Michael B. Shingleton  
Primary Examiner  
Group Art Unit 2817

Continuation of 11. does NOT place the application in condition for allowance because: With respect to claim 12, here a delay network is claimed that controls the waveform control. As stated "something" causes the NRZ data to have a preset time period or delay. This "something" can be called a "delay network". No specific definition to delay network appears in the original disclosure. Thus the "something" in Mizokawa that cause the NRZ signal to be "1" for example and for how long, i.e. how long the delay is till the next "1" or "0" is a "delay network". Typically oscillators that are used to provide the clock signal have internal thereto a delay network whether that be an LC circuit, a counter/comparator or the like

The same goes with the other claims in that the examiner must give the broadest reasonable interpretation to the claims. Claim 16 does not require that there be an immediate transition of the output signal from the intermediate level to the other of the normally high and low levels. Just that there be a transition. The term transition is such a broad term in that something can transition from one level to another level with intermediate steps in between. For example with Mizokawa the NRZ data does not always have to be "1", "1", "1" "0", "1", "0", "0". It could be "1", "1", "1", "0", "1", "1", "0". Here one would go from high at the end of the first "0" to an intermediate level and the level will go to another intermediate level before finally going to the normal "low" level. The overall transition would be from high to an intermediate level to a low level as claimed. Again the claims do not exclude other intermediate levels in between.

Applicant also takes issue with the term "diode connects". Applicant cites a reference showing a diode connected transistor and the examiner agrees that that if you directly connect the base of a bipolar transistor to the collector of the bi-polar transistor that one would form a diode function. But the claims do not require that this be the specific structure set forth in the claims. Furthermore, "diode connected" and "diode connects" are two phrases with two different meanings. The examiner contends that a rectifier would be a device that "diode connects" in that it allows current flow in only one direction. Would applicant consider a rectifier as a device that does not "diode connects? In fact a device that restricts current flow chiefly to one direction is my basic definition of a diode. In a transistor one does not have to have the base directly connected to the collector in order to have the restriction of current chiefly in one direction. The examiner has cited the basic definition of diode as presented in the American Heritage Dictionary of the English Language in support of the broadest reasonable interpretation of this phrase. Also note that an SCR is another diode based device that restricts current flow chiefly in a single direction and is called a rectifier. The two main terminals of an SCR form a diode or rectifier. Note the picture in the definition provided of a diode. Here there are at least four terminals, two are probably for the filament, one for the cathode and one for the anode. Without the control voltage applied to the filament a diode function would not form. Just because a transistor has a base does not mean like in the case of the vacuum tube that there cannot be a diode function formed between the collector and the emitter. Again the examiner must give the broadest reasonable interpretation to the claims consistent with the specification. You do not have to have the base of a bi-polar transistor directly connected to the collector to form a diode. A transistor is inherently a diode in operation just like the basic Fleming valve. Addition of a grid(base,gate) to the Fleming valve does not change the fact that a diode function is present for the current would still be restricted to a single direction, the grid only allows for the throttling of the current flow. Applicant has not specifically provided in the specification a specific definition of the term "diode connects" limiting this to some other structure different from the prior art. Applicant's argument is that the examiner cannot interpret the term "diode connects" in the manner set forth in the Office action and that a more narrow definition must be used yet there is no such narrow definition set forth in the original disclosure.